



ENGINEERING, MANUFACTURING AND INDUSTRIAL TECHNOLOGY

A Quarterly Newsletter for Teachers and Students Focusing on Recent Events and Developments in the EMIT Pathway

Office of Career and Technical Preparation

September 2005

Welcome to the fourth issue of the EMIT Newsletter, published by the Department of Labor & Economic Growth, Office of Career and Technical Preparation. This newsletter is intended to be informative and up-to-date. If you missed a past issue, they may be viewed at:

http://www.michigan.gov/mdcd/0,1607,7-122-1680_2629_2724-101172--,00.html. The

newsletter remains under development and your suggestions and comments will help it continue to be interesting and informative. Any ideas should be addressed to Patricia Talbott-Dills, (517) 373-0359 or talbott-dillsp@michigan.gov.

Many of you are receiving this newsletter via email and it is our desire to continue to expand this service because it is economical and it allows for the timely dissemination of date sensitive information. If you or a colleague have not provided us with an email address, please take a minute and send it to us.

Junior Engineering Technical Society (JETS)

The Junior Engineering Technical Society (JETS) provides an opportunity to expose students to the world of engineering. Their website, www.jets.org, gives information about careers, programs, and resources that illustrate real-life teamwork and problem solving skills.

The organization has added a new feature to its site, the *JETS Challenge*. Every Friday, they post a new challenge question that pertains to an area

of engineering. Students who solve *the Challenge* e-mail their answer to JETS and are entered into a drawing to win a copy of the book *Is There an Engineer Inside You?* Challenge submittals are due by midnight on the following Thursdays and the correct solutions are posted the following Monday.

Scholarship Opportunities

First Generation College Kids: If you have the distinction of being the first in your family to attend college, two major national scholarships may be available. The *Coca-Cola First Generation Scholarship Program* offers scholarships at



382 colleges and universities across the nation. For more information, visit: http://www2.coca-cola.com/citizenship/education_firstgenerationscholars.html.

Mercedes-Benz USA Scholarship Program grants one-time \$2,000 scholarships to 500 students who are the first in their families to pursue a college education. Visit: www.mbusa.com/drivefuture for details.

Architecture: **The American Architectural Foundation** offers scholarships to high school seniors who are entering a degree program at a four year college. Contact them at: www.archfoundation.org.

Bill & Melinda Gates Foundation, Gates Millennium Scholars Program. To qualify, an applicant must have a 3.0 or better GPA, must be nominated by a teacher or principal, must complete an essay about his/her future goals, and must demonstrate an unmet financial need. Contact them at: www.gmsp.org.

House Bill Encourages Careers in Engineering

A proposal has been introduced in Congress that is aimed at attracting students to math, science and engineering careers. Under the program, the federal government would pay the interest on student loans for individuals who pursue careers in math, science, or engineering. To receive the benefits under the program, an individual must agree to work for five years in a job related to science, math, or engineering, including teaching in those fields at any level. The government would pay the interest on the loan starting at the beginning of the service requirement and continuing afterwards. Loan interest benefits would be capped at \$10,000 per person. To read more, go to:

<http://www.house.gov/science/press/109/109-49.htm>

Reminder for Automotive Programs

Please remember that during the months of September and March the Office of Career and Technical Preparation will be conducting its bi-annual review of all automotive, collision, and medium/heavy truck programs to insure that their NATEF certifications are current.

Programs that have allowed their certifications to lapse will be sent letters of notification, which may place their Added Cost funding in jeopardy.



Mechanical Engineering Design Day

The Michigan State University Department of Mechanical Engineering is conducting their Design Day at the MSU Union Building in East Lansing. This opportunity will be held on **December 9, 2005**. It is a hands-on, **free** conference that provides numerous unique opportunities for 7-12 grade students to participate in innovative activities involving experiential learning. An instructor or chaperone must accompany students. No more than 25 students can be accepted from any one school.

Design Day will provide:

- a) An opportunity to collaborate with students from other schools to solve engineering problems.
- b) An opportunity to attend professional sessions where graduating engineering students deliver formal presentations to a corporate audience of engineers from MSU's industrial partners, parents, and other guests.
- c) An opportunity to interact with, learn from, evaluate, and then assign a grade to teams of engineering students. These teams design and build machines and mechanisms to perform various functions such as shredding vegetables or autonomously cooking and flipping a pancake.
- d) An opportunity to indulge in a free, all-you-can-eat luncheon and many more activities.

Should be interesting and sounds like fun! For additional information and registration, contact: Jill Bielawski, (517) 353-8133 or bielawsk@egr.msu.edu.

Super Highway to Success

Automation Alley, in conjunction with Oakland County and Oakland Schools, is sponsoring a career event designed to bring students and employers together on November 16, 2005. More than 300 companies and 15,000 students, parents, and educators are expected to participate.

Students will be allowed to follow one of the six career pathways and talk to companies that have present or future jobs in that area. It will give students a first-hand look at the skills they will need to be successful in that career pathway. The event will be held at the Pontiac Silverdome, 1200 Featherstone Road, Pontiac, Michigan 48342.

For more information visit:

www.superhighwaytosuccess.org, or contact Dawn Smith at (248) 858-5473 or smithd@oakland.k-12.mi.us.

Careers in Construction Week

The National Center for Construction Education and Research (NCCER) announced its first annual National Careers in Construction Week October 17-21, 2005. This activity is designed to increase public awareness of the hard work and contributions of our nation's craft professionals. There is a FREE planning kit available that contains a number of promotional materials and suggestions to help you plan a successful week.

Log on to: http://careers.nccer.org/cic_week.htm.



Interesting Manufacturing Resources

CareerMatters: www.ilc.org. More than 300 job descriptions, videos, and information on post-secondary studies. Explore a large number of educational, training, and career options. This information is designed for high school students.

GetTech: www.GetTech.org. GetTech helps students, teachers and parents plan for careers in technology, engineering, manufacturing and

science. GetSmarter lets students test math and science skills against students from around the world.

Manufacturing is COOL!:

www.manufacturingiscool.com Explore the Society of Manufacturing Engineers' (SME) Career Information and Opportunities area to learn about manufacturing and other engineering careers, salary information, and accredited schools.

Precision Metalforming Association

Educational Foundation: www.pmaef.org

Careers in the metalforming industry. Contents include: descriptions of daily life, industry types, industry processes, industry benefits, career ladder, training programs, plant tours, scholarships, apprenticeships, curriculum, career opportunities, and more.

Teacher Resources

Teachers Network is a nationwide, non-profit organization that identifies and connects innovative teachers within the public school systems. The organization has provided over 40,000 grants and fellowships in the areas of curriculum, leadership, policy, and new media. Visit them at: www.teachersnetwork.org/aboutus.

Essential Skills: http://www15.hrdc-drhc.gc.ca/english/general/home_e.asp. Go to this website to find information about the skills that people use in their jobs and in their lives every day. Includes occupational profiles that show how people use essential skills in different occupations.

Questions, comments, and/or suggestions regarding this newsletter, should be addressed to Patricia Talbott-Dills, (517) 335-0359 or talbott-dillsp@michigan.gov.

